

### Rationality in environmental discourse: a cultural approach to environmental policy analysis

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RATIONALITY IN ENVIRONMENTAL DISCOURSE  
A CULTURAL APPROACH TO ENVIRONMENTAL POLICY ANALYSIS

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## 1 RATIONALITY IN ENVIRONMENTAL DISCOURSE

The environmentalist discourse presents a paradox: it is based upon "hard facts" about nature, namely damage to the natural environment, and it has also undermined the belief in 'hard facts', the unspoken authority of expert knowledges.<sup>1</sup> There is nothing more 'factual' than environmental problems - yet the discourse on facts has shown that we have to grapple with contradictory factual certainties on the state of the environment. The debate in environmental discourse does not concern only what should be done when we are confronted with the 'hard facts' of damage to the environment. Facts are also contested.

This has repercussions on the way environmental issues are communicated in public discourse. Traditional public discourse has taken facts for granted and engaged in the struggle over which normative (moral or legal) principles to apply in a situation where facts were given. Public discourse on environmental issues differs in that it has extended communication of norms to communication of facts. This in turn increases the discourse's paradoxical structure. Experts have to tell us what the facts are - yet they produce contradictory evidence. Ultimately then, the facts are the result of a debate; in the literal sense of the word, they are socially constructed.

To explain the evolution of environmentalism as a public issue a constructionist perspective is therefore needed. The theory that norms are socially constructed is commonplace in sociology. That facts are socially constructed is less obvious. This does, however, not imply that facts are arbitrary. There are restrictions: these have to do with 'culture'. Facts are socially constructed within the limits of culture. What we perceive and experience as facts is dependent upon culturally organized and shared symbols that give meaning to them. Culture organizes man's relationship to nature, including his way of conceptualizing it: this consequently implies that facts are dependent upon culture.

The following paper focuses on the claim that the contradictory factual certainties in the state of our knowledge of the environment change the rationality of policy-making. Facts no longer help to decide normative conflicts. Policy-making based upon 'hard facts' will produce neither legitimate nor rational decisions, thus questioning traditional assumptions about the rationality of policy-making. More facts will not help us to devise better policies. Such policies will only emerge from "politicizing" facts, that is, from more politics. My second

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<sup>1</sup> This undermining has taken place in academic as well as in public discourse. Constructivist perspectives and sociology-of-knowledge arguments flourish in academic discourses, affecting the basic methodological principles of this discourse. In public discourse, distance to expert knowledge and a renaissance of experiential knowledge describe recent tendencies in the relation of science and its public. See, as an excellent discussion using the Windscale case, Wynne (1982). The general point is well taken in Wynne (1988a). A similar point is made by Shrader-Frechette (1991).

claim is that this change in the rationality of policy-making in environmental matters necessarily implies an increase of public communication and therefore a growth of politics: a politics that debates facts like norms. Such a change would imply a push toward a democratic organization of the reliance upon expert knowledge as the embodiment of facts in modern societies.

Thus, the basic problem of the analysis of environmental policy-making is the following: *how is it possible to devise an analysis that allows us first to understand the implications of the process of social construction of facts for policy-making and second, to develop an adequate notion of the rationality of policy-making?* The answer to the first question will be that of devising policy analysis as cultural analysis that concentrates on the communication of facts instead of concentrating on the assumption of "hard facts". The answer to the second question will be that of locating the rationality of policy-making in the communication of facts itself.

To answer these questions I shall start with an analysis of how the facts used in environmental policy-making are socially constructed. This will lead us to the question of the role of culture underlying the social construction of facts. Based on these considerations, I shall go on to discuss some basic cultural assumptions underlying the social construction of facts in environmental discourse. The second part will specify these culturalist assumptions, relate them empirically to historical roots in European cultural history and identify its dual code. The third part will discuss some implications of such a cultural reconstruction for a cultural analysis of environmental policy-making. It will conclude that one part of the solution to the problem of how to arrive at rational decisions in environmental policy-making is to leave the definition of facts to politics, and thus to the procedural rationality of public communication where norms and facts are debated and continuously put into question. The second part of the solution is acknowledging the specific character of nature as being an intrinsically collective good.

## **2 POLICY ANALYSIS AS CULTURAL ANALYSIS**

### **2.1 Facts in policy analysis**

In a paper on "energy tribes", a cultural sociologist, Michael Thompson, once told a story about model building for policy purposes at the International Institute for Advanced Systems Analysis (IIASA) (Thompson 1984). There once was a project leader, the GREAT ENERGY CHIEF, who developed the big problem of energy policy analysis using a hard science model: an energy gap had opened up, and if nothing was done about it, things would continue to get worse and worse. The solution was to increase supply. A young visiting economist replied by pointing out that there are elasticities in supply and demand and these are linked by a price mechanism. "Ah, yes", replied the GREAT ENERGY CHIEF, "but economics is a soft science and we are taking a hard science approach to the problem". The young economist then went to the blackboard and drew the following chart (without the terms in brackets):

	Hard facts	Soft Facts
hard thinking		Soft Science (cultural analysis)
soft thinking	Hard Science (IIASA-Type analysis)	

This little matrix also organizes my discussion on the role of *facts* ("hard facts") in policy analysis. I shall start with Thompson's critique of hard science model building underlying much policy analysis as placed in the bottom left box and his argument on engaging in soft science in the top right box.<sup>2</sup> The problem with the hard science approach of the IIASA type - underlying increasingly modern environmental policy decisions - is its very notion of facts. The IIASA energy modelling exercise, for example, consisted in an energy study in which three huge computers were linked in order to generate scenarios. A mathematician then looked at the model (using 2000 variables!) and tried to find out how much he could throw away to explain the transition from initial assumptions to outputs. He found, to his astonishment, that he could throw it all away. Inputs are - as Thompson argues - 'hardwired' to the outputs. The 'hard facts' are already entailed in the initial assumptions.

I want to point mainly to Thompson's conclusion that modelling with 'hard facts' is modelling with the wrong variables. Instead, the *generation of assumptions* should be made its object. This means analyzing the process through which facts rationalizing and legitimating policy-making are socially and culturally constructed. By doing so, we shall have to engage in the analysis of soft data: arguments, reasons, interpretations. We shall have to engage in soft science.<sup>3</sup> When there are high levels of uncertainty concerning facts, policy analysis becomes the analysis of soft facts. We have to consider the possibility that there is a permanent disagreement among experts on 'hard facts'. We even arrive at a situation where policy decisions have to be made under conditions of contradictory certainties. But how do we handle the paradox of environmental discourse, that it is based on facts while putting the basis of factual claims into question?

## 2.2 Facts in policy-making and public debate

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<sup>2</sup> This exercise in soft science hard thinking might even result in abandoning the difference between hard and soft science. I shall at least engage in hard thinking with a soft science against the soft thinking of a hard science.

<sup>3</sup> This argument has been backed by the new sociology of science. See Wynne (1982, 1988) and Knorr-Cetina (1984, 1988a,b) for some examples of this approach.

The argument presented above has been formulated within the theoretical paradigm of 'cultural theory' (Thompson et al. 1990). It claims - deriving its basic assumptions from the work of Mary Douglas<sup>4</sup> - that the way we perceive environmental problems and devise solutions for them is determined by 'cultural biases'. What is considered a theoretical principle by cultural theory, is an empirical phenomenon in politics. The debate of facts is constitutive for politics. Thus environmental policy is - given a certain degree of public communication - necessarily bound to environmental politics for generating a legitimization of its decisions. The rationality of policy-making therefore moves from the level of hard-fact based policy makers to the negotiation of facts, to environmental politics.<sup>5</sup> The more complex facts become, however, the less the probability that they are debated. This complexity has so far hampered development toward an environmental policy-making that is sensitive to cultural biases, allowing it to find adequate forms of conceptualizing, communicating and deciding environmental issues (Rayner 1984, 1991).

Environmental policy-making is a case that is predisposed to such a development while still maintaining a lasting resistance to such debates.<sup>6</sup> A good example of such a hard-fact ideology is the environmental policy of the European Community,<sup>7</sup> where now approaching 3 per cent of the total EC budget) is spent on non-hard science research of environmental issues. Social-science research is just entering the mind of those who devise the policies for the next years to come. This type of policy-making reflects the approach to environmental policy making that emerged in Western Europe in the 1980s. Its underlying cultural orientation is ecological modernisation through scientifically based regulation.

The assumption of rationality that guides this policy orientation is, however, no longer uncontested. It has already been debunked by organization theorists who argue for systematic

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<sup>4</sup> See Douglas (1982, 1986, 1988) who has argued that there are different social processes at work when constructing facts. These forces, such as institutions, collective memory and cultural biases in general, shape the perception of what a fact is. This applies above all to the way in which scientists, contrary to lay people, perceive facts. Policy makers use this difference to present themselves as relying on hard facts (in the eyes of the people as their constituency) which are debated among scientists. But even scientists do not escape this mechanism of transforming soft into hard facts, as the example of Thompson above has shown.

<sup>5</sup> Policy researchers show that the environmental movements exercise influence over their national industries and governments. These movements have not yet, however, really touched one of the most stable cornerstones of policy-making free of politics: the policy-making of the EC.

<sup>6</sup> Even in the ecological movement the recourse to facts has been an important phenomenon in some deep ecological and environmentalist thinking. Biological facts are simply opposed to other biological facts. Lovelock's work is a good example (Lovelock 1979, 1989).

<sup>7</sup> A good historical overview of EC environmental policy up to the Single European Act (1987) is found in Koppen (1988). For the further development see Liberatore (1991). The hard-fact orientation is also well documented and critically analyzed in Liberatore (1989).

limits to rationality ('bounded-rationality model') or argue for an unavoidable irrationality of policy decisions taken under conditions of complexity and scarce time ('garbage-can model'). The legitimacy of these decisions, when thematized, has to be found in something else beyond the rationality of facts, namely in the rationality of action. This conclusion has been drawn by rational-choice theorists. Since there is no certainty about facts, rationality can rely only on the rationality of the actors who act and interact according to their preference structures. This is, however, not, as Elster (1989) has shown, sufficient to explain social actions through rational motivations. It is norms that people follow. This argument again brings us back to the question of from where the rationality of the norms we follow comes.<sup>8</sup>

### 2.3 Bringing culture back into policy analysis

Norms are elements of cultural traditions within which we act. Thus our model of a social construction of facts is like a step-by-step reduction of facts to norms to cultural traditions. Starting with facts, our model presupposes norms that are part of a shared knowledge of the world that allows for communication.<sup>9</sup> There is no normative construction of facts outside a preexisting cultural context that makes shared meanings available in order to communicate about facts. We do not communicate in a symbolic vacuum. *Culture* is already there before we start to communicate about facts.<sup>10</sup> Social analysis must take the cultural context into account to understand this social construction.

Cultural analysis forces us to relativize the claim of a universal rationality that actors use when acting on the outside world. When we bring culture in, we are confronted with a series of different action strategies that cannot be reduced to one universal type. This becomes increasingly obvious the more we analyze ecologically motivated actions. In functionalist theories culture as a medium of communication between cooperating actors is simply given as an integrated whole. Thus culture can be separated from social analysis. When we introduce culture as something that is itself reconstructed (and sometimes deconstructed)

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<sup>8</sup> We could simply go back to a counterfactual position and argue about which norms can ideally be rationally justified, but this is not the way reality works. Norms are historically and culturally given, and the extent to which this culturally given rationality can be mobilized, defended or attacked depends on politics.

<sup>9</sup> The concept of communication I refer to in the following is derived from the theory of communicative action as developed by Habermas (1981). It implies that in any communication we have to take into account three claims of validity of the communicated: rightness, truth and honesty (*Wahrhaftigkeit*). Any attempt to communicate something claimed to be true will always imply a mobilization of the other two claims. We shall even go further and argue that the historically specific interrelationship between these claims are constitutive for the culture within which any communication is necessarily embedded.

<sup>10</sup> This argument does not imply that we have to forget about the way in which culture is used. I am not making a plea for a radical culturalism that reifies culture as a mere social fact. This is the danger Sahlins (1976), for example, encounters when arguing for a culturalist explanation of production and reproduction. A strong case for an approach avoiding this implication can be found in Wuthnow (1987).

through communication, we have to acknowledge the existence of competing and often irreconcilable cultural forms. Thus both modes of social analysis cannot be used to grasp the specific dynamic of communication that is implied in policy analysis. Bringing culture back into policy analysis<sup>11</sup> does not mean that we should turn to and engage again in mere normative analysis. Rather, my conclusion is that hard science (bottom left box in the above diagram) has underrated the force and importance of culture and has not engaged in the analysis of soft data. Our explanatory models are so poor because we do not know about the culture within which social developments take place. This applies above all to the problem of nature. *To understand the dynamics of communication of environmental problems, we must understand how culture operates in the communication of facts.* Cultural analysis therefore has to identify what these claims of validity are and how they are socially used in concrete situations of communication.

To do so we have to identify the paradigms organizing the social usage and communication of good reasons.<sup>12</sup> In the following I will analyze historically shaped cultural constructions of nature and try to identify the basic world views at stake in Western environmental discourse.<sup>13</sup> This discussion extends from an older one on the role of religious traditions both

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<sup>11</sup> The argument in favour of more culture in political analysis can be backed by a reference to a recent experience: there is no hard science analysis that I am aware of that foresaw the developments that took place in Eastern Europe in 1989. I know only of people working in political and social theory (for example, the theorists of civil society) who were asserting such developments. Why were these soft model builders hard thinkers? Because they built their soft models on *cultural assumptions* saying that developments in the socialist and the capitalist countries could not escape the normative claims for autonomy, liberty and equality, democratic participation and the right to a decent life. In this sense the soft facts of normative claims underlying modern societies seem to be better suited to forecast developments than, for example, hard science mathematical models of collective behaviour (which in this case leads to soft thinking). We can easily extend this argument to environmental politics: there was no theory in the 1960s known to me that foresaw that the environmental question would become of primary importance - with one notable exception: Moscovici's *L'histoire humaine de la nature* (Moscovici 1968)! This book is anything but standard social science, Moscovici himself being a social psychologist of international repute. His book is based upon the primarily normative idea of a human history of nature ending in an interactive relationship between society and nature that would become the basis of politics of advanced modern societies.

<sup>12</sup> Thompson (1984) calls these paradigms "world views". He distinguishes between five world views that underlie strategies of action in environmental matters. The first three are seen as policy relevant. They are: (A) business as usual, (B) middle of the road and (C) radical change now. There are two additional ones that do not appear in public debate (and might even be treated as criminally irresponsible attitudes): (D) life is a lottery (what you don't know scenario) and (E) take what you can get (sufficient unto the day scenario). Just check these possibilities with regard to the very hard-looking question: is economic growth possible without energy growth? A and C say no, B says yes. And D and E don't care.

<sup>13</sup> This analysis of environmental discourse is distinct from other attempts to analyze it by its emphasis on "pre-ideological" cultural factors. See for an interesting analysis of an analysis of ecological discourse in terms of its ideological patterns, Kitschelt (1984).



in the shaping the environmental consciousness and in the production of the environmental crisis. It will try to clarify some of the older, often contradictory arguments and use this discussion to show that European cultural traditions contain the elements to justify both: the exploitation *and* the protection of nature. These cultural traditions serve not only as justifications of an instrumental relationship toward nature, but also as sources of legitimation for the world views that shape the modern perception of environmental problems. This is their central role in the social construction of facts. These world views will be constructed as ideal types and then applied to the reconstruction of the two rationalities that play a role in environmental discourse.

### **3 THE TWO RATIONALITIES OF ECOLOGICAL THINKING**

#### **3.1 The ambivalence of modern culture toward nature**

Environmentalism as a protest culture is rooted in a cultural undercurrent and countercurrent in European cultural history. Its carriers up to this century have been countercultural movements. The *ethics* of these groups is regarded as the key to an explanation of the rise of the environmentalist culture in advanced modern Western societies. It is not pollution itself nor the danger for human health as such, but a specific moral and expressive attitude that explains the rise of the 'question of nature'. Such protest culture, however, is not simply counter-culture, something completely different from dominant culture. It is part of a common culture that makes both dominant and protest culture, part of the same cultural tradition. This common culture is contradictory: it embraces both a growing instrumentalization and growing sensibility toward nature, within modern cultural traditions.

Thus, in order to understand the cultural context of the modern protest culture of environmentalism, we have to reconstruct the deep-seated ambivalence of modern culture toward nature. The basis for this ambivalence can be found - as will be discussed in the following<sup>14</sup> - in the Greek and Jewish cultures that, through the Christianization of Europe, constitute our cultural heritage. A unique blend of two traditions, modern culture has developed the alternative options available within them following the Greek model. The present-day reemergence of a non-instrumental culture of environmentalism can be shown to be the result of a change in dominance from the Greek to the Jewish model. This does not imply that this will be a stable solution, but that the actual culture of environmentalism draws upon cultural traditions that have been marginal (and marginalized) within European cultural history.

#### **3.2 Religion and environmentalism: the state of the discussion**

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<sup>14</sup> In this section I draw heavily upon two published papers, one dealing with the notion of progress and its challenge in environmentalist discourse (Eder 1990a), and the other dealing with counter culture movements (Eder 1990b). A general theoretical account of the idea of a social and cultural construction of nature can be found in Eder (1988).

The role of the Judeo-Christian heritage has been an important point in the explanation of the cultural roots of the environmental crisis (White 1976; Passmore 1974).<sup>15</sup> The central argument of Lynn White's seminal article of 1976 (White 1976) has been that the message of the Bible was responsible for the subduing of the earth and the division between man and the rest of nature. A complementary argument has been the recourse to mystical traditions in Greek thought regarding nature, which is explicated, for example, in the 'Gaia-hypothesis' (Lovelock 1979, 1989). Gaia, the Greek goddess of earth, symbolises the idea of the earth as a living organism. Lovelock has used this metaphysical idea for his scientific philosophy of the earth as a homeostatic system. The important point here is that religious elements of traditional Greek mythology are used for constructing an environmentalist holistic philosophy. Whether this has something to do with Greek mythology or even with the role of this mythology in its societal context is still controversial.<sup>16</sup>

Lynn White's argument has never been criticized regarding the underlying premises of interpreting the Biblical texts. The attempt to go 'beyond the Lynn White debate' (Hargrove 1986, 1989) is ultimately only an attempt to persuade theologians to accept its implicit premises. This later discussion maintains mainly an old cultural stereotype that is well established and stabilized in the cultural history of Europe.<sup>17</sup> The discussion cannot be solved by reference to the 'official' Christian tradition alone because the latter is already a blend of contradictory traditions. My claim - contrary to the debate just mentioned - is that the Judeo-Christian tradition contains both, an instrumental *and* a non-instrumental use of nature. The basic code of European culture is one pulled both ways between a bloody model, derived from the Greek code of ritual legitimation of political power in the city state, and a non-bloody counter model, derived from the Jewish code of ritual purity.

The locus of a non-instrumental use of nature within the Judeo-Christian tradition is the *idea of paradise*. To understand the relevance of non-instrumental traditions it is essential to understand the way in which the social and cultural life of man, after the expulsion of Adam

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<sup>15</sup> An excellent discussion of this early argument is found in Nash (1989, pp. 87ff). Under the heading "The Greening of Religion", he argues that the critique of the Judeo-Christian tradition served to justify the new environmentalism. Conscious of the fact that each historical construction is biased by looking at the present, I have to redress some of these arguments because they no longer allow to make sense of either the environmental crisis or of the rise of environmentalism. See also Young (1990, pp. 54ff).

<sup>16</sup> Vernant (1971) offers a good rectification for such views. See Béney (1990) as a good and recent discussion of the Gaia-hypothesis.

<sup>17</sup> This debate resembles in part the debate on the Protestant ethic thesis by Max Weber who has been accused of arguing for the role of religion in the development of capitalism. In the same way, religion has been accused in this debate of being responsible for the ecological crisis. See Deer (1975). Another similarity is the problem of interpreting key texts, here the meaning of Genesis. See Barr (1959), cited in Nash (1989, p. 237), for an attempt at an interpretation that deviates from that of White.

and Eve from the paradise, has been organized. The Jewish tradition basically diverges from the Christian variant that had originally drawn on it. The Christian tradition did so by turning God's sanctions for man to labour in the world, into the positive task to subdue the world - an interpretation that has more to do with the Greco-Roman than with the Jewish tradition (adding the qualification that the Greek tradition also consisted of contradictory strands, some of which were very close to the Jewish model).

Thus the established hypothesis is turned on its head by arguing that the composite view of a 'Judeo-Christian' tradition actually prevents an adequate understanding that is complemented by an idealizing view of the humanist Greek heritage. Both assumptions, deeply engrained into the self-description of European culture, are rejected on methodological (the ideal-type approach that decomposes what history has composed) and theoretical (we have to choose textual references, the use of which has something to do with basic institutions in the respective society, which in this case is the system of religiously legitimized political domination) grounds. It is only through such sociologically informed approaches that we are able to escape well-established narratives for whose interest they ever might have been written.<sup>18</sup>

### 3.3 Reconstructing the code of European culture

The two sources of Europe's cultural evolution<sup>19</sup> are found - this is the only assumption shared with the classic debate on this issue - in its Greek and Jewish heritage. Both have equally shaped the complex 'code' underlying this cultural evolution. The key to an understanding of this tradition can be found in the way in which the difference between nature and culture has been handled. This difference has to deal with the separation of culture from nature and culture's continuous dependence on it. This ambivalence has been solved in different ways - ideal-typically we can distinguish a violent and a non-violent form. The specific symbolic representation that is a good indicator for the way in which the difference between nature and culture has been dealt with is the symbolism related to 'blood'.<sup>20</sup>

Ancient Greek society legitimized its form of political organization by *bloody sacrificial rites*.<sup>21</sup> These sacrificial Delphic rites represent the real symbolic base of the society. The

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<sup>18</sup> The following proposal is therefore more an attempt at a programmatic statement than a final piece of historical research. For first formulations see Eder (1988).

<sup>19</sup> This point has been made systematically within the context of a social-evolutionary theory by Parsons who talks about "seedbed-societies". See Parsons (1971).

<sup>20</sup> For the relevance of the blood symbolism in general see Loeb (1974).

<sup>21</sup> The system of political domination was the basic organizing principle of this type of state-organized society. See Eder (1976).

social system was held together primarily by this symbolic code and only secondarily by its democratic ideology (in fact an intellectual invention of later Greek history!). Sound evidence for the dominance of the bloody model underlying Greek culture comes from the cultural orientations of those social groups opposed to it. Most important were the Pythagorean groups who distinguished themselves by their vegetarianism, a value orientation clearly opposed to the bloody rituals (Detienne 1979). Vegetarianism here is a symbolic rejection of the dominant culture, a ritual reversal of the dominant culture. Logically, persecuting these vegetarian groups became the way to reinstate the dominant culture.

Jewish society, on the other hand, was characterized by a cultural code that succeeded in institutionalizing cultural restrictions upon its forms of political organization. This was the decisive difference between the Jews and their neighbours. The non-sacrifice of Isaac is the key myth marking the historical point when the Jews began to abstain from human sacrifice even while their neighbours continued to practice it. Increasingly, the Jews restricted the shedding of blood. This restriction was rationalized by the myth of a *non-bloody paradise*. Because in reality it was impossible to circumvent bloodshed completely, rules of ritual purity became enormously important. These rules put strong limits upon the practice of bloody sacrifice and other practices concerning animals and other forms of nature. The rules became more and more complicated as social life increased in complexity. The unique canon of dietary prohibitions and rules characteristic of Jewish society thus represents a cultural tradition that has tried to limit the use of an Other being (be it human, animal, or nature as such) as a mere object. It favours instead a culture that puts symbolic limits upon such uses.<sup>22</sup>

Jewish obsession with *ritual purity* explains why its political society never really developed the social dynamism characteristic of Greek or Roman society. Yet, the code had tremendous cultural validity, and intervention from outside could not change it. The Jews were never mobilized by political elites in the way neighbouring societies were. The Romans knew exactly why they were trying to force the Jews to eat pork. It would have been the best way to destroy the symbolic basis of their culture. The early Christians also belong within this cultural code. The Romans saw them as a radical Jewish sect.<sup>23</sup> The cultural basis for their persecution was - like the persecution of the Jews later in European culture - rooted in the

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<sup>22</sup> A central characteristic of Jewish culture has been its lack of missionary activities. This can be explained not simply by the special relationship with God as a chosen people which is already a consequence of a specific structural characteristic of this culture. This characteristic is the attempt to preserve in worldly matters the memory of a different world, the paradise. It is this specific utopian character that did not produce the motivation to look for a this-worldly realization of the telos of a chosen people. The telos is securing the continuity with a paradisaic past in which men, even beasts were equal beings, a world without blood. A discussion and more detailed interpretation of these Jewish practices can be found in Eder (1988) with further references.

<sup>23</sup> This claim is supported by the interpreters of the scriptures found in Israel some sixty years ago and kept secret until very recently.

cultural divide that distinguished them from, and even opposed them to, the bloody tradition of Greco-Roman culture.

Thus the cultural code of Europe has a complex heritage. On the one, hand we have the Greeks, whose society mobilized its social, economic and political dynamic by putting rather loosely structured controls upon the use of power. On the other hand, we have the Jews, whose society integrated its economic, political and social dynamic into a cultural world that put rigid limits upon the use of power.

Further examination of this dual cultural tradition in European history brings to light - such is our contention - the two ideal-typical conceptions of nature that have been identified as the Greek and the Jewish traditions. The Christian adaptation of the *Greek tradition* was used to rationalize nature without restrictions.<sup>24</sup> Combining the command to subdue nature with a ritual blood complex underlying the expansionist nature of Greek culture led to a unique constellation: nature (represented by the sacrificial animal) could be treated as a mere means to other, namely human, ends. The logic of this coding, which permits the shedding of blood without any cultural restriction, underlies the dominant relationship of man to each other as well as of man to nature in modern society. For this purpose, the *Jewish tradition* was less well suited, for its culture had built-in blocks against the use of blood, as expressed in the restriction of the use of bloody rituals, by binding sacrificial acts to the model of a paradisaic state of nature. The ritual rules of purity were attempts to reinstate, at least in part, the Biblical paradise where man and nature were subject to a higher law and lived together in peace. This idea of a harmonious or peaceful relationship of man with nature limits its use by human beings. These two roots still operate in contemporary culture at a structural level, each defining a different relation of man to nature.

The analysis of this dual tradition allows us to broaden our conception of the cultural code underlying European culture. Both the dominant and the latent traditions have contributed to the process of its cultural evolution. Christianity, as the symbolic system mediating between and blending these two traditions, has not only reproduced but also intensified this constellation of two codes in one culture. The cyclical outbreaks of protest and rebellion, of 'heterodoxy', in Christian culture against the dominant orthodox traditions can be interpreted as attempts to reverse the relationship between the two cultural codes.<sup>25</sup>

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<sup>24</sup> Here the explanation for the usefulness of the Bible for exploiting nature can be found. It is linked to a specific interpretation of God's command to subdue the earth. As a discussion of this interpretation see Nash (1989, pp. 90ff). Our interpretation allows us to see this command within the context of the paradisaic story. To subdue nature is an effect of sin and as such an expression of evil. The good therefore would lie in the opposite, a peaceful life in harmony with nature, as the paradise promised it to be for all beings.

<sup>25</sup> The movements associated with, for example, Saint Francis and John Hus are carriers of a cultural orientation opposed to that institutionalized in orthodox Christian culture. The love of animals and the discursive-egalitarian relationship with them that Saint Francis preached and practised on the one hand, the vegetarianism in the Hussite movement on the other, are indicators of a "non-bloody" culture, a culture based upon an unbloody image of the relationship of nature with culture. The reaction to such heterodoxies,

The Greek model became dominant in shaping the development of European society. Because the Jewish model contradicts it, it has always been circumscribed, in the extreme shut up in ghettos and persecuted. This dynamic of European culture has had costly effects. Its history is the history of suppressing the 'non-bloody' tradition by the 'bloody' one within modern culture. Nevertheless, the 'non-bloody' tradition has, despite its bloody suppression, remained part of the 'collective unconsciousness' of European culture.<sup>26</sup>

### 3.4 The dual cultural code and the modern conception of nature

Instead of going into a historical study,<sup>27</sup> we shall defend only the argument that this dual cultural code can be used to make sense of a general feature of the modern discourse on nature. This feature is its double-sidedness. In early modern Europe, the increase in knowledge that allowed for the rationalization and ultimate instrumentalization of man's relation to nature simultaneously produced a sensitivity to the world of nature. Historical research undertaken by Thomas (1983) summarizes the alternatives of the relation of man to nature in modern society in the following four dichotomies: *town and country*, *cultivation and wilderness*, *conquest and conservation*, and *meat or mercy* (Thomas 1983, pp. 242ff).

At least after the experience of the great urban epidemics, the country became sentimentally the locus of a better life, one closer to nature. The wilderness was where man was dependent on his capacity to coexist with nature and where the ancient virtues of man still counted. Conservation principles developed as an attempt to save the natural world from the destructive effects of civilization. A merciful attitude developed toward beasts because they were

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reinstalling the dominant Greek tradition, has been the establishment of church and state power, a formal-rational institutional apparatus, which not only allowed but needed the persecutions of heretics, witches and Jews, bloody sacrifices for a culture based on them for its own reproduction. It even started to destroy itself - for which the destruction wreaked by religious wars are the proof. This "bloody" culture is also the one that contained the modern instrumentalist relationship of man with nature. I have discussed these ideas more at length in Eder (1988).

<sup>26</sup> The concepts of "bloody" and "non-bloody" are used to convey with the metaphorical meaning the ideas that govern the code of the cultures that they denote. The centrality of blood symbolism in cultures, established by cultural anthropologists (Loeb 1974), allows us to justify the use of these metaphors. This does not imply, however, that "bloody" cultures produce more aggressive individuals than "non-bloody" ones. This psychological fallacy, widespread in much traditional sociology-of-culture literature, is to be rejected. Rather, we claim that societies organized on the basis of the "bloody" code have institutions that canalize human interests and ideals in a way that produces expansionist and missionary cultures including all the horrors and persecutions that can be part of such cultural biases.

<sup>27</sup> A special historical study would be necessary in order to do justice to the complexity of these processes. For the sake of argument, it is sufficient to maintain that there has been a continuous fluctuation from heterodoxy to orthodoxy and back.

seen not as prey or food but as fellow creatures. These ideas lay at the base of counterculture movements that have emerged since the eighteenth century. They idealize country life, seek a better life in the wilderness, call for the conservation of nature and a right to life for threatened creatures, and plead for an end to killing animals simply for the sake of human consumption.<sup>28</sup> Thus we cannot accept the idea of a sharp division between an early 'medieval' and a later 'modern' stage in European history, where the early stage is characterized as a period when poetry and concrete imagery governed the relations between man and nature and the later period as one when abstract understanding and rational/scientific treatment of nature triumphed. There are crosscurrents in this history, and we must respect its complexities. We propose, however, to reduce the complexity to two 'ideal-typical' crosscurrents: to a *culture that sees nature as dominated by man* and a *counterculture embodying a natural piety toward nature*.<sup>29</sup> These two cross-currents disagree over whether absolute human superiority over nature is universally shared or not.

The interpretation of the cultural code of modern European culture offered above allows us to understand some practices and movements in modern European history that are based on contrasting relations to nature and manifested today on a much broader scale within the ecological mood and movements. We can decipher a cultural meaning behind the romantic love for animals, modern vegetarian movements and animal rights movements as some of the forms in which this code manifests itself (Sprondel 1986). We can also decipher a cultural meaning in the spirit of the capitalist and technological relationship with nature.<sup>30</sup> This dual meaning contained in the code of modern European culture is, in our opinion, the key to an understanding of the dominant as well as the new, spreading type of relationship of man with nature in modern society. With the environmental crisis that we experience today, however, the dominant cultural tradition has come increasingly under attack as incapable of grasping the problems it generates. These problems, culminating in the possible destruction of nature,

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<sup>28</sup> An interesting treatment of meat as a cultural metaphor is found in Fiddes (1991). He argues that the cultural importance of meat lies in its representing the domination of man over nature. See also my treatment of eating taboos on meat in Eder (1988) which defends a similar argument.

<sup>29</sup> The construction of ideal types can only be justified by its value in making sense of a complex reality. This attempt is guided by the idea that we do not have to look for cultural traditions outside the European context to make use of the comparative strategy of contrasting ideal types for explaining the logic and dynamic of a cultural tradition. The reality will necessarily consist of a mixture of ideal types. If such a way of analysis helps to understand differences in a complex reality then this methodological procedure has proven its usefulness.

<sup>30</sup> In this sense, our hypothesis complements the Weberian hypothesis of the Puritan origins of the capitalist ethic. It simply assumes that modern culture has two faces, only one of which was taken into account by Weber. There was, by the way, no reason for Max Weber to study cultural undercurrents in modern culture because his problem has been the rise and development of the dominant culture. It is only in his famous passages on the new polytheism coming out of modern culture that we can see some links to what we describe here.

have raised the problem of the difference between culture and nature and its relationship and therefore thematized a basic structural element of European culture. This process forces modern society to confront the other cultural tradition that has up to now remained outside the discourse on modernity and modernization. The 'collective unconsciousness' has begun to be discussed publicly and shared collectively. The effects of this process of discovering and uncovering a latent tradition in the cultural evolution of modernity cannot be exaggerated. They will certainly change modern culture.

## **4 A NEW RATIONALITY PARADIGM IN ENVIRONMENTAL POLICY ANALYSIS**

### **4.1 Taking into account cultural biases in environmental policy-making**

The thesis presented so far can be summarized as that of the dual culture in modern European culture (or the 'two-cultures thesis').<sup>31</sup> In this section, it will be used to analyze the cultural context of environmental policy-making. Environmental policy is conceived as the field of action in which the cultural code we have identified will have decisive effects. This assumption does not exclude that environmentalism as social and political movement has its roots in specific heterodox traditions in Judeo-Greco-Christian culture, but it adds the orthodox traditions that are embodied in institutionalized politics to them. In environmental policy-making the two codings of European cultural traditions are confronted with each other and are forced to find a new 'modus vivendi'. Environmental policy-making, in contrast with traditional forms such as social policy-making, is interesting not only because it is forced to action by well institutionalized ecological pressure groups and environmental consciousness, but also because it is forced to develop a new cultural coding of the object of policy-making. This thesis will be discussed as a *new rationality paradigm* in policy-making.

This new rationality paradigm takes into account the cultural dimension of the environmental issue.<sup>32</sup> It deals with the question of how modern society copes with its dual cultural code

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<sup>31</sup> This is opposed to a similar attempt to distinguish between different cultural biases at work in modern culture (and even any culture) which has been formulated by Douglas (1988) and further elaborated by her collaborators (Thompson et al. 1990). They distinguish between four (sometimes even five) cultural biases in which our two biases would be more or less equivalent to the egalitarianist and the hierarchist bias. The basic theoretical intention is similar.

<sup>32</sup> This postulate resonates well in recent literature on environmental policy. Hajer (1992b) argues for such an approach whilst criticizing the technocratic self-misunderstanding of the strategy of "environmental performance review". See also Hajer (1992a) as a general critique of the idea of ecological modernisation in European environmental policy since the 1980s. The alternative that he proposes is a discourse-theoretical analysis, which sees facts generated by "discourse coalitions". This is also the basic assumption of an ongoing research on "Framing and Communicating Environmental Issues" (Eder 1992a, 1992b). See, for parallel attempts, Rayner (1991).



and thus with the environmental discourse that has been pushed by the rise of modern counter culture traditions. In a situation where counter cultural traditions gain importance because of increasing environmental risks, the question becomes all the more important and even crucial: how do the two modern cultures work upon the reproduction of modern societies? How do we decide on environmental policy-making in a society where two incommensurable cultures have come up and questioned the way in which we perceive nature?

The reconstruction of the dual code underlying European culture has led us to the idea of two distinct and even incommensurable cultural traditions underlying present-day environmentalist discourse. *In theoretical terms, the idea of two ways of coding 'facts' is probably the most sweeping implication of a cultural analysis of how the relationship of man with nature is transformed into a social and political problem in modern societies.* The theory of a dual coding of facts in environmental discourse has repercussions on policy-making: environmental policy-making can no longer work with an objectivist notion of facts. It has to thematize the assumptions that shape the selection and perception of relevant facts.<sup>33</sup>

Nobody would doubt that there is selection of facts in environmental policy-making. The question is to what extent such selective mechanisms can be considered and defended as *rational*. Traditional policy-making has defended an implicit consensus on such assumptions that cultural analysis would describe as a culturally specific consensus. Its explicit defence was based on the claim of impartiality and objectivity when dealing with facts. The idea of a formal rationality in administering social problems, which is the political version of the scientific ideal of a value-free social science, has dominated traditional policy-making. This ideal is no longer an adequate model of policy analysis. Facts in environmental discourse have an evaluative and expressive connotation that is no longer self-legitimizing, and they can no longer be separated from value judgements and ideals and interests. Therefore the rationality of models of environmental policy-making has to be reconsidered.

## **4.2 Limits to classic rationality assumptions in environmental policy-making**

Factual claims are based on contested assumptions. These assumptions imply value judgments derived from conflicting cultural definitions of the right and the good. This phenomenon has made environmental policy-making a widely contested area of policy-making. It has become easy to point out the 'ideological character' of this area and obvious that such a situation is devastating for any concept of *material rationality* (in the Weberian sense, as substantive regulatory rationality). Material rationality no longer makes sense because we know that we do not share a culture in which facts are contested. We lack such shared

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<sup>33</sup> This is an implication of the "hardwiring" of factual claims in model-building with the assumptions underlying such models mentioned above.

understanding at least in a society that no longer allows for authoritative statements of what the facts have to be for such an empirically based rationality. What then is to be done?<sup>34</sup>

One proposition that has characterized a large part of environmental policy is to return to *formal rationality*. In giving up any direct control of society through policy-making, this concept of rationality fosters a return to indirect methods of regulating society. Instead of producing direct regulatory means like standards, prohibitions and licences (all of which imply some knowledge concerning the empirical limits for rational standards), environmental policy-making is developed more and more by indirect means, such as effluent charges or marketable emission permits.<sup>35</sup> This implies a type of law that distributes rights while abstaining from interfering in individual actions; individual self-interest must decide whether it feels harmed by facts or not. Instead of engaging in a policy dispute over facts, definitions of how much it costs to emit poison into rivers or the air are made collectively binding. Everybody can buy such rights - and those concerned are enabled to do more than just complain; they can buy emission rights. However, the main question still remains unanswered: who defines the amount of emission rights? Who controls this 'ecological currency'? There must be somebody who sets the limits for the exploitability of natural resources.

Thus the problem of facts is avoided on the level of telling each individual what to do, considering factual evidence.<sup>36</sup> Facts are left to individual calculations of preferring one situation of facts over another. The problem of facts regulates itself by the self-interest of the individuals simply because one's advantage lies in basic self-interest. Instead of prescribing how much pollution human and non human nature can support, we count on self-interest.<sup>37</sup> Then we run into another problem; for we have to limit natural resources to get the process of environmental self-regulation started. Nature is only by definition a scarce good, and this

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<sup>34</sup> The following remarks are not meant as a systematic account of environmental policy-making. The work on this topic is substantial. It only tries to develop a perspective from which the turn to what will be called procedural rationality makes sense. Therefore, no further references on environmental policy analysis and its relation to legal regulations are given here.

<sup>35</sup> Similar propositions have been made with respect to the public sphere, for example, citizenship vouchers which can be given to any movement or organization that people think represents their interest.

<sup>36</sup> How illusory is the idea that factual statements might control individual behaviour is "proven" by the everyday practice of polluting the environment through car driving and so on. Instead of complaining about this, we should be aware that facts are socially existent not because there is a validity claim of truth to them - as Habermas (1981) would put it - but because some facts are good for communicating with other people and others not.

<sup>37</sup> This solution resembles the arguments of early liberal political and legal theory (this is in fact "alteuropäisch"! ). Define how much it costs to use political rights (for example in terms of years in prison or in terms of number of administrative permissions for collective gatherings), and you will obtain a minimum of rationality in politics.

definition has to be given by some institution. Within the model of formal rationality this is to be done by the *state* as the impartial arbiter in a situation of scarce cultural consensus over the facts at stake in the environmental issue.

The advantage of this solution is that the state does not have to find a true solution to the problem of creating scarcity. It only has to define the scarcity, and within these limits everybody can calculate the factual effects of his action. This model of rationality would work, were we able to reduce the cultural context within which the problem of nature is discussed to interest-maximizing individuals and to a state creating the conditions for Pareto-optimal ways of coordinating individual interests. This - our historical reconstruction has shown - is only one half of what the cultural code underlying modern European societies accepts as 'rational'. It is the dominant mode of relating man to nature. This model of rationality is relativized when we acknowledge the existence of more than one culture and even the existence of incommensurable cultures.

The solution I should like to propose is contrary to the idea of the state as the last instance in a situation of culturally deep-seated dissensus. It confronts the idea of the state (and the idea of formal rationality that is constitutive for it) with the idea of an institutional procedure that allows to distribute equally the opportunities to communicate about facts, moral concerns and anxieties about the risks we run in environmental matters. The rationality that will be able to account for incommensurable cultures can be found only in a procedure that makes everybody equally responsible for the decisions that are made. Such a procedural solution implies the placement of policy-making outside the state in a public ('discursive') context. The simple fact of increased communication over uncertainties (or contradictory certainties) undermines the idea of a state setting mere limits for self-interested individuals, that is limits its formal rationality and its variants. The state is just one element of a public context, one of several collective actors in the realm of political communication. Its special function remains then to be an arbiter and mediator, a role the state has taken over in emerging forms of dispute settlement and informal systems of negotiation.

This is true the more environmental facts become debatable in public. Facts about the environment are increasingly generated by everybody who takes part in public discourse. They tend to be what people (or the more or less professional spokesman) claim them to be. The increasing communication over environmental facts becomes, therefore, increasingly dependent upon the rationality of this form of communication. This alternative to formal rationality can be called *procedural rationality* (Eder 1986, 1990), which should be sought in conflict-regulating and agenda-setting institutions.<sup>38</sup>

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<sup>38</sup> An interesting project along these theoretical lines is undertaken by van den Daele at the Wissenschaftszentrum Berlin; see van den Daele (1992). Specifically, see also policy-making within the context of risk controversies, Rushefsky (1984). A general theoretical model for systems built on procedural rationality is found in Scharpf (1988). The philosophical underpinnings of such a procedural rationality are developed in Shrader-Frechette (1991), especially pp. 53ff and pp. 77ff. This latter work explicitly relates

This has become new currency in policy debates. Increased communication because of the ideological character of ecological thought and action has - paradoxically - led to a thematization of assumptions in the construction and selection of facts in ecological communication.<sup>39</sup> It has even fostered new 'policy styles' (Richardson 1982). One is the model of corporatist interest accommodation (in which environmental groups are incorporated in the policy process in a consensual strategy) and the other is a more adversary model focusing on public enquiry.<sup>40</sup> Both models have been pushed by collective mobilizations for the environmental issue. Environmental policy might be the area that is most in need of extending the context of policy-making to the whole public sphere where contenders and defenders of ecological policies meet. Policy-making becomes, by extending its procedures of participation and balancing competing views, a new ritual of political communication.

In what sense then can these communication 'rituals' be seen as rational? I should like to propose that it is rational to engage in rituals of communication in situations of uncertainty. This proposition does not, however, give any substantive criterion regarding environmental policy-making. It only affects the policy style, which is a necessary but insufficient condition for a type of rationality that can ground rational environmental policy-making. In the following section an attempt is made to formulate such a sufficient condition. It is sought in what I should like to call *cultural rationalities*.<sup>41</sup>

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the plea for such a rationality with the problems of objectivity and values in risk evaluation. The conclusion drawn is called a "populist" conception of rationality!

<sup>39</sup> This is reflected in recent sociological work on the communication of facts. It shows that not the facts as such but a specific representation of them in communication and by communication is the constitutive element of the process of constructing reality (Johnson and Covello 1987; Rice and Atkin 1989). This insight is politically neutral: everybody can draw upon its implications, the conservative as well as the radical. The central question then becomes: how are facts selected?

<sup>40</sup> There is growing literature on this topic. See O'Riordan (1985) among many others. Central to it is the emphasis on participatory elements. This has already led to diverse institutionalized forms of dispute settlement and mediation procedures regarding environmental issues. See Wehr (1979) as an early theoretical formulation. An overview of dispute settling from the mid-1970s to the mid-1980s is found in Bingham (1986). See also the report of "Improving Dialogue with Communities" (Hance et al. 1988), which describes itself as a "Risk Communication Manual for Government". This is related to the rise of environmental consulting firms, especially in the United States, but increasingly also in Europe, which specialize in mediating environmental conflicts and resolving environmental disputes.

<sup>41</sup> This term has been used to account for risk discussions by Krimsky and Plough (1988).

### 4.3 Two models of cultural rationality

The dual cultural model of relating to nature that has been reconstructed above shows that modern European societies inherit - ideally - two cultures in the evolution of modern culture. The thesis of two cultures implies that there is more than one and less than an indefinite number of ways of analyzing a culturally defined relation to nature. Even within the highly modernized culture of Western societies we can defend neither a universal nor a relativistic standpoint.<sup>42</sup> The analysis of the roots of the modern culture of environmentalism shows that there are at least two ways of doing so. Whether or not they are incommensurable, conflicting validity claims imply that conflicts over ways of action can no longer be resolved by reference to implicit validity claims.<sup>43</sup> Communication does not help because it will become interminable without resolving the conflict between validity claims. The internal relation between conflicting validity claims has, therefore, to be looked at more closely.

The existence of (at least) two cultural models forces us to emphasize those mechanisms that hold together what culture divides. The culture of environmentalism, targeting traditional political culture in the waves of environmental mobilizations during the last two decades, has not won the battle, but contributed to an important social effect: the consensus that rationality does not reside in either one or the other culture, but in the communication of contradictory claims of validity for one's view of the world. The culture of environmentalism thus turns out not to substitute one cultural tradition (the dominant one) for another one, but to change the way society looks at itself. It has led to a reconsideration of moral values and expressive needs that had been excluded in the dominating tradition, and it has forced to modify some of the standards by which the dominant culture has looked at the problems modern societies have run into.

To give a theoretical account of the way in which these two cultures perceive the facts of environmental damage and environmental problems in modern societies I shall distinguish between the *justice* perspective and the *purity* perspective. The former excludes what the latter thematizes: a cultural conception of nature that gives to nature an intrinsic value beyond its being a means for human well-being. I shall claim that the purity perspective contains the justice perspective as a special and restricted case of perceiving nature.<sup>44</sup> From a justice perspective, the instrumentalist tradition of the relation of man to nature can easily find a rational legitimation.<sup>45</sup> Within the purity perspective, this instrumentalism has become

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<sup>42</sup> This could be called the position of a modest universalism or a limited relativism.

<sup>43</sup> This implies a critique and radicalization of Habermas' theory of communicative action that can only be pointed out in a cursory manner here.

<sup>44</sup> As well, the purity perspective contains the justice perspective as a limiting case. What matters is the dominant perspective underlying competing cultural patterns of relating man to nature.

illegitimate, implying that there exists a different rationality standard by which to judge the instrumentalist position.

The formulation of an 'exploitation of nature' derives from the 'justice perspective'. Even the justice that would like to see an end to the exploitation of nature is a form of justice that only minimizes this exploitation in order to be able to continue it. There is nothing in nature to support a 'just' treatment by which to interrupt this logic. The justice perspective runs into the problem of pinpointing the beginning of exploitation. Is there exploitation when man can no longer exploit nature? And is exploitation more than the damage the exploiter suffers by exhausting his resources? Exploitation is evidently a concept that amounts to nothing more than a moralization of an instrumental relationship with nature.

Nevertheless, injustice to nature is a motivation for people to question the basic premises of their relation to nature. It mobilizes animal liberators who see the equal treatment of all beings as the premise of human moral action, a premise characteristic of the utilitarian ethics of animal liberation (Singer 1976). The liberation of animals, however, will not challenge man's relation to nature. It will only alleviate some of the consequences implied by a culture based on the justice paradigm. It will help to minimize the suffering of animals used for experimental purposes, but it will not change the relationship of man to the animal world. It will not remove man from his moral pedestal. This attitude is paternalism applied to nature, or more precisely, to the animal world. This projection can easily be integrated into the dominant culture. The relation of man to nature will be one of a private up-ending of the economically instituted use of nature. The use of nature in production will remain unaffected by this pet culture.

The justice perspective excludes what I have called the counter culture model in the European tradition of relating man to nature. The problem of nature, as conceived within counterculture traditions, has to do with even more than decency, it has to do with sentience. This other model relies on what I have called the purity perspective.<sup>46</sup> The 'purity perspective'

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<sup>45</sup> There is one type of moral argumentation that tries to bridge the justice perspective with a non-instrumental view of nature. This has been the utilitarian justification of the relationship between man and nature, an idea that links Bentham to modern environmental economists and has spread - paradoxically - with our greater awareness of the environmental crisis. This utilitarian model of morality can be understood - as Max Weber did it - as a manifestation of "material" or "substantive" rationality. This means applying criteria of justice to a non-instrumental relation with nature. But this utilitarianism has to be based upon anthropomorphic projections upon the natural world treating nature like culture. This conflationist view of society and nature ends in ideological discourses on nature - the best examples are the conservationist movements that base their actions upon such conceptions of the world. See Singer (1976, 1979), Salt (1980) and Harwood (1928) as examples.

<sup>46</sup> This formulation is derived from the work of Douglas (1966, 1975) who argues that notions of purity belong to elementary cultural structures shaping worldviews and forms of social action before they enter the realm of rational and argumentative communication.

codes the difference between nature and culture in a way that becomes evident in the values attributed to the notion of purity: they are health (referring to bodily and psychic integrity), empathy and life or to its complementary notions of sickness, suffering and death.<sup>47</sup> These values are ones that cannot be divided up to satisfy the needs of as many as possible. Health, bodily integrity and life are holistic values which are indivisible goods. Any form of life that guarantees only a part of them is necessarily incomplete and insufficient.<sup>48</sup>

These values do not fit the criteria of (distributive) justice; they are totalizing goods because we can either have or not have it. There is nothing to distribute because these goods are indivisible. The purity perspective shows us that there are evaluative criteria in the relationship of man to nature that produce problems as facts of an environmental crisis different from these the perspective of justice would allow us to see. There is certainly a strong affective element in the purity perspective that shapes this relationship, but this also is valid for the justice perspective which acknowledges criteria like sentience and empathy. There is therefore more to it. It forces us to accept the idea of *collective goods* that cannot be left to individual interests, whatever motivations of justice might guide them.

The rationality claim contained in the purity perspective is that there are collective goods that contain an intrinsic value. Philosophically speaking, this implies an argument of the superiority of the good over the just.<sup>49</sup> Such a value hierarchy (which has nothing to do with the traditional natural-rights based value hierarchies) redefines the sources of legitimacy on which environmental policy-making has to rely. It is forced to consider another model of rationality different from the one inherited from the 'social question' and institutionalized in the social policy model of rationality.<sup>50</sup> There are at least two competing models that have to be related, and whether the good will override the just or the other way around will be a matter for future discussions that need - this is the necessary condition of rationality

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<sup>47</sup> These remarks certainly need more theoretical elaboration. It is only to note that sickness, suffering and death are the themes of metaphysics. They are the driving forces of religion-building. Thus the purity/pollution perspective can also be seen as an objectifying way to analyze the religious/metaphysical aspect in the social construction of reality.

<sup>48</sup> It is still possible to think of these goods in terms of distributive justice, for example in terms of distributing scarce number of organs to be transplanted. There is, however, no way of finding a "good" solution in any such decision. Ultimately, we shall be forced to take distributive decisions, but they will no longer be "just" in an emphatic sense, but only second best solutions. This point will be taken up later.

<sup>49</sup> This argument is directed against some neo-liberal theories of justice that try to establish the opposite point, of a superiority of the just over the good. See Lukes (1992).

<sup>50</sup> See Van Parijs (1991a, b) as an interesting attempt to defend this model. He proposes an alternative way of uniting ecological thinking with the traditional liberal emphasis upon the justice perspective by radicalizing the latter.

mentioned above - 'procedural rationality' as a minimum. This will not save the environment, but it will generate conditions that are conducive to it.

The environmental discourse has made modern publics sensitive to a non-instrumental value of nature by enhancing the counterculture idea of an unpolluted nature and by modernizing its holistic notion of nature. In environmental policy analysis this idea has found a short and strict definition: nature is a collective good which should not be at the disposition of individual interests. In this rationalistic formula (which could also inform 'flou' [vague; blurred] formulas such as the fashionable one of 'sustainable development') we can decipher the quintessential result of a counter culture history: the idea of a nature that is a good for the whole of society and that should be treated as such.

## 5 CONCLUSION

Does the result of the discussion that there is more than one rationality at stake in environmental policy-making imply a relativistic methodological conclusion? There are three reasons that could pull us toward a relativistic notion of rationality:

- (1) The existence of competing cultural models of nature forces us to abandon the idea of nature as something outside society. Nature exists for us only through culture. To the extent that we have to accept that nature is a cultural construction, the notion of 'hard facts' vanishes. Nature is - like all social facts - a soft fact. This will open our way of 'regulating nature' through environmental politics and policies to moral claims and moral discourse.
- (2) Environmental policy cannot be based on the authoritative nature of 'hard facts'. Nature as a collective good is a soft fact that will increase communication and argumentation about what should be done because of the possibility of competing claims of these facts. A political culture of communicating 'as-if-facts' develops. Groups begin to argue as if there were 'hard facts'. To free political communication from 'hard facts' will accelerate communication - and the remaining problem is to guarantee communicability and solve the problem of emerging communicative power.
- (3) Cultural analysis leads us to question the very basis of modern rationality: the idea of bare facts. Policy analysis as the most advanced form of rationalizing the reproduction of modern societies has given us the possibility to explore the cultural basis of this advanced form of formal rationality. When environmental policy analysis can no longer be based upon this type of rationality we are forced to base the rationality of policy decisions on soft facts. Thus policy-making will be drawn into the communication of 'as-if-facts' (which are soft facts) using institutional power to validate them.

That there are no hard facts, that we can talk about everything, that everything is a social construction: all these claims come close to a relativistic position. We do not, however, have



to draw such a relativistic conclusion from these arguments. There are again at least three reasons that limit this potential relativism:

- (1) As long as there is a struggle over 'as-if-facts', rationality lies in the process of communicating such soft facts. The institutionalization of procedures of negotiating and communicating interpretations of facts contains the possibility of procedural rationality. This does not imply a return to absolutism, but rather an 'anti-antirelativism' (Geertz 1984). The purity model is not only a second type of rationality developed within the European tradition that competes with others but also creates the conditions of arguing about the relative weight of each.
- (2) The observation of two traditions in one culture is an argument against the hegemonic role of one culture and also an argument against relativism. Therefore the purity model becomes the key to an understanding of new and so far suppressed elements of rationality in environmental policy-making. Since this model is the dominated one its thematization not only lays bare the suppressed model but also lays the bare fact of suppression as such which has repercussions on the legitimacy of the dominant model.
- (3) To conceive nature - in line with what we have called the Jewish model - as an indivisible, holistic entity justifies the construction of nature as a collective good to be shared equally by all. Thus a new ground for fairness and justice can be laid in the modern discourse of a just and fair society.

The reconstruction of cultural traditions regulating the relationship of man to nature allows us to identify the forms of symbolically mediated relationships between the two. We do not only use nature for instrumental purposes, we also use it to 'think' the world (to use an expression of Tambiah (1969)). We use natural differences to make sense of social differences, which in turn gives meaning to natural differences (Douglas 1975). Nature, in a sense, gives lessons on how to conceive differences.

Moving our focus from justice to purity gives us a better understanding of the differences underlying the emerging modern European culture of environmentalism. The analysis of cultural movements carrying counter cultural traditions thus forces us not only to broaden our theoretical notion of the cultural 'code' underlying European culture, it also forces us to see the carriers of counter cultural traditions as more than movements of protest against modernity and modernization. I claim that the two competing models relating man to nature have become the field of a new emerging type of social struggle over two types of modernity in advanced modern societies. It is my contention that the culture of environmentalism contains the elements for an alternative way of organizing social relations in modern society.

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Young, J. (1990). *Post Environmentalism*. London: Belhaven Press. Abstract:

Environmental policy analysis is based on contradictory facts which shape the communicative nature of environmental policy-making. This is the reason why environmental policy-making has to be based on a notion of procedural rationality. To explain the specific dynamics of communication in environmental policy-making, the contradictory nature of environmental facts is analysed: such facts are based on opposing cultural world views, deeply embedded in the Judeo-Christian tradition of European culture. Their procedural rationality has to mediate not only between factual claims, but also between competing and often incommensurable cultures.

Key words:

environmentalism, policy analysis, cultural theory, spirit of environmentalism

Running title:

Rationality in Environmental Discourse